MCK GROUP – HS-RA-001 HAZARDOUS SUBSTANCES RISK ASSESSMENT

Worker-Accessible App Extract – Master Document: HS-RA-001 Risk Assessment Register V1.1

Related Documents: HS-PR-001 Risk Assessment Procedure; Hazardous Substances Procedure; HS-PR-002 Daily Plant Inspection Procedure; HS-PR-003 Personal Risk Assessment (Take 5) Procedure; HS-PR-005 Incident Investigation & Reporting Procedure; OP-PR-017 Unsafe Plant Isolation Procedure; OP-PR-018 Spill Management & Containment Procedure; Fire Procedure; Manual Handling Procedure; Relevant task-specific SWMS; Chemwatch SDS; Hazardous Chemicals Register; Training & Competency Register; Relevant EMP and SSMP; MCK Group IMS Registers Master; Work Health and Safety Act 2011 (Qld); Work Health and Safety Regulation 2011 (Qld); Managing risks of hazardous chemicals in the workplace Code of Practice 2021; Labelling of workplace hazardous chemicals Code of Practice 2021; Preparation of safety data sheets for hazardous chemicals Code of Practice 2021; https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/hazardous-chemicals/managing-hazchem-risks; https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/hazardous-chemicals/managing-hazchem-risks/hazardous-chemicals-register; https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0027/72639/managing-risks-of-hazardous-chemicals-cop-2021.pdf

Brendan McKenna Earthmoving

Risk ID	Risk Event / Activity	Hazard	Causes	Potential Impacts	Current Controls	Initial Risk	Residual Risk
HZ-001	Hazardous chemicals register	Chemical not identified or recorded	New product introduced without review or register update	Uncontrolled exposure, incorrect emergency response, compliance failure	Hazardous Chemicals Register maintained; SDS reviewed before use; Chemwatch managed by Operations Manager	15	2
HZ-002	Safety data sheets	SDS unavailable, outdated or inaccessible	SDS not obtained, not current, or workers cannot access it	Incorrect handling, PPE or emergency response	Current SDS obtained from supplier/manufacturer; accessible through Chemwatch; workers instructed how to access SDS	15	2
HZ-003	Chemical labelling	Unlabelled or incorrectly labelled hazardous chemical	Label damaged, container decanted without label, product identity unclear	Wrong chemical used, unsafe exposure, incorrect emergency response	Original labels retained; workplace containers labelled; damaged/missing labels replaced; unidentified chemicals quarantined	15	2
HZ-004	Decanting hazardous chemicals	Exposure or incorrect identification during transfer	Splashing, incompatible container, poor labelling, overfilling	Burns, poisoning, fire, spill	Use suitable compatible container; controlled transfer; PPE per SDS; immediate labelling; spill controls available	15	4
HZ-005	Storage of hazardous chemicals	Leak, fire or incompatible chemical reaction	Poor segregation, damaged containers, excessive quantities, unsuitable storage	Fire, explosion, toxic exposure, environmental contamination	Store in designated areas; follow SDS segregation requirements; secure containers; maintain ventilation and spill containment	15	4
HZ-006	Incompatible chemicals	Dangerous reaction	Acids, alkalis, oxidisers, fuels or other incompatible products stored/mixed together	Fire, explosion, toxic gas, burns	SDS compatibility reviewed; incompatible products segregated; containers clearly labelled	15	2
HZ-007	Fuel storage and handling	Flammable liquid fire or spill	Ignition source, damaged container, overfilling, poor storage	Burns, fire, environmental contamination	Approved containers/tanks; no ignition sources; spill kits; fire controls; routine inspections	20	4
HZ-008	Diesel and petrol refuelling	Fuel splash, vapour exposure or fire	Overfilling, hose failure, poor transfer technique, ignition source	Burns, irritation, fire, spill	Controlled refuelling; engine shut down where required; no smoking/ignition sources; spill kit; PPE per SDS	15	4
HZ-009	Oils, lubricants and hydraulic fluids	Skin contact or environmental release	Leaks, spills, handling during servicing	Dermatitis, slip hazard, contamination	Gloves where required; controlled handling; drip trays/spill kits; maintenance and leak reporting	12	4
HZ-010	High-pressure hydraulic fluid	Fluid injection injury	Damaged hose, checking leaks by hand, pressurised system opened	Serious injection injury, tissue damage	Do not check leaks by hand; isolate/depressurise before repair; inspect hoses; competent maintenance personnel	15	2
HZ-011	Degreasers and solvents	Skin, eye or inhalation exposure	Poor ventilation, splashing, inappropriate PPE	Irritation, dermatitis, dizziness, respiratory effects	Use least hazardous suitable product; follow SDS; ventilation; gloves/eye protection as required; lids kept closed	12	4
HZ-012	Paints, thinners and aerosols	Flammable vapour / inhalation exposure	Use near ignition source, poor ventilation, overspray	Fire, respiratory irritation, eye/skin exposure	SDS controls; ventilation; keep away from ignition sources; PPE; secure storage	15	4
HZ-013	Aerosol cans	Bursting or fire	Heat exposure, puncture, storage near ignition source	Fire, explosion, projectile injury	Store away from heat/ignition; do not puncture or burn; inspect damaged cans; follow label/SDS	10	2
HZ-014	Compressed gas cylinders	Cylinder damage, leak or uncontrolled release	Poor securing, impact, heat, damaged valve	Fire, explosion, asphyxiation, projectile hazard	Cylinders secured upright where required; valve protection; segregated storage; leak checks; competent handling	15	4
HZ-015	Welding and cutting gases	Fire, explosion or gas exposure	Leaking hoses, poor cylinder storage, ignition near combustibles	Burns, fire, explosion, asphyxiation	Competent personnel; leak checks; flashback protection where applicable; fire controls; cylinder separation/storage	15	4
HZ-016	Wet cement and concrete	Alkaline chemical burns	Prolonged skin contact, contaminated clothing, splashes	Skin burns, dermatitis, eye injury	Avoid direct contact; gloves, boots and eye protection; wash facilities; remove contaminated clothing promptly	12	4
HZ-017	Battery electrolyte	Acid exposure	Damaged battery, spill, maintenance or charging	Chemical burns, eye injury, corrosion	Eye/skin protection; controlled handling; suitable neutralisation/spill controls; ventilation during charging	10	2
HZ-018	Battery charging	Hydrogen gas / ignition	Charging in poorly ventilated area, sparks or flames	Fire, explosion, burns	Ventilated charging area; no ignition sources; correct charger; inspect leads and batteries	10	2
HZ-019	Chemical spills	Worker exposure and environmental contamination	Container failure, vehicle incident, transfer error	Burns, inhalation exposure, soil/water contamination	Spill kits; SDS available; trained response; isolate area; report and contain spill where safe	15	4
HZ-020	Chemical exposure to eyes or skin	Acute exposure	Splash, leak, poor PPE, contaminated surfaces	Burns, irritation, dermatitis, eye damage	PPE based on SDS; hygiene; wash facilities; first aid; contaminated PPE/clothing removed	15	4
HZ-021	Inhalation of vapours, fumes or mist	Respiratory exposure	Poor ventilation, spraying, solvent use, hot work	Irritation, dizziness, respiratory illness	Substitution where practicable; ventilation; minimise exposure; respiratory PPE where SDS/risk assessment requires	15	4
HZ-022	Ingestion / poor hygiene	Accidental ingestion of hazardous substance	Eating, drinking or smoking with contaminated hands; chemicals in food containers	Poisoning, illness	No eating/drinking in chemical handling areas; hand washing; chemicals never stored in food/drink containers	10	2
HZ-023	Chemical transport in work vehicles	Leak, spill or incompatible load during transport	Unsecured containers, heat exposure, damaged packaging	Exposure, fire, environmental contamination	Containers closed and secured; segregate incompatible products; protect from damage/heat; carry SDS access and spill kit as appropriate	15	4

HZ-024	Chemical waste and contaminated absorbents	Unsafe disposal or secondary exposure	Incorrect waste container, mixing wastes, poor labelling	Fire, exposure, environmental harm, regulatory action	Waste identified, labelled and contained; incompatible wastes segregated; approved disposal arrangements	**15**	**4**
HZ-025	Unknown, expired or obsolete chemicals	Uncontrolled chemical hazard	Unlabelled container, old product, inherited stock	Exposure, reaction, fire, incorrect disposal	Quarantine unidentified chemicals; do not use; obtain identification/SDS where possible; arrange approved disposal	**15**	**2**
HZ-026	Contractor-supplied hazardous chemicals	Chemical introduced without MCK Group review	Contractor brings product onsite without SDS or approval	Uncontrolled exposure, incompatibility, emergency response gaps	Contractors required to provide SDS and disclose hazardous chemicals before use; site controls reviewed	**15**	**4**
HZ-027	Training and information	Workers unaware of chemical hazards and controls	Insufficient induction, SDS not understood, unfamiliar product	Unsafe handling, exposure, poor emergency response	Induction/toolbox information; SDS access; task instruction; supervision; competency where required	**15**	**4**
HZ-028	PPE selection and maintenance	Inadequate protection from chemical exposure	Wrong glove/filter/eye protection, damaged PPE, poor fit	Skin/eye exposure, inhalation injury	PPE selected from SDS and risk assessment; inspected; replaced when damaged; workers trained in correct use	**15**	**4**
HZ-029	Emergency response to hazardous chemical incident	Delayed or incorrect response	Workers unsure of spill, fire, exposure or evacuation actions	Serious injury, environmental harm, escalation	Emergency arrangements; SDS first-aid/fire/spill information; first aid; spill kits; emergency contacts; incident reporting	**15**	**4**
HZ-030	Placard and manifest quantity assessment	Threshold requirements not identified	Chemical quantities increase without review against WHS Regulation Schedule 11	Non-compliance, inadequate emergency information	Quantities monitored through purchasing/storage controls; assess placard and manifest thresholds when storage quantities change	**10**	**2**
HZ-031	Manual handling of chemical containers	Hazardous manual tasks	Lifting drums, containers and chemical supplies; awkward postures and repetitive handling	Musculoskeletal injuries, strains and sprains	Mechanical aids; minimise manual lifting; suitable work positioning; team handling where appropriate; Manual Handling Procedure	**9**	**6**

Controlled Document Notice: This document is a worker-accessible extract from the MCK Group HS-RA-001 Risk Assessment Register. The controlled master register contains the complete risk assessment, action tracking and review information. Refer to the current controlled version for full details.